

MUKHIN, I.V.

Compressor for the GST-L device. Geofiz.razved. no.10:87-88
'62. (MIRA 15:12)
(Gases--Analysis) (Compressors)

LEVINSKIY, M.I.; MUKHIN, I.V.; SEREDA, I.P.

Colorimetric method of determining free chlorine in hydrochloric
acid. Ukr.khim.zhur. 29 no.1:100-101 '63. (MIRA 16:5)
(Chlorine--Analysis) (Hydrochloric acid)

GORBUNOV, Ye.; MUKHIN, K.

Determining the number of auxiliary workers in a workshop. Sets.
trud 6 no. 1:131-133 Ja '61. (MIRA 14:1)

1. Nachal'nik normativno-issledovatel'skogo byuro Gor'kovskogo
avtozavoda (for Gorbunov). 2. Nachal'nik otdela truda i zarabotnoy
platy Gor'kovskogo avtozavoda (for Mukhin).
(Gorkiy--Automobile industry--Production standards)

MUKHIN, K.

Improve the organization of wages constantly. Sots.trud 7
no.4:57-62 Ap '62. (MIRA 16:1)

1. Nachal'nik otdela truda i zarabotnoy platy Gor'kovskogo
avtomobil'nogo zavoda.
(Gorkiy--Wages--Automobile industry)

MUKHIN, K.

Common concern of participants in production. Sots. trud 7 no.12:78-81
D '62. (MIRA 16:2)
(Gorkiy--Automobile industry--Production standards)

BARKOV, L.M.; MUKHIN, K.N.; OGURTSOV, V.V.; ROMANTSEVA, A.S.; SVETLOLOBOV,
I.A.; CHUYEVA, S.A.; SHLYAPNIKOV, R.S.; LIKHACHEV, M.F.; STAVINSKIY,
V.S.; STRUNOV, L.N.

The problem of the D^{\dagger} -meson. Zhur. eksp. i teor. fiz. 43 no.1:335-
337 J1 '62. (MIRA 15:9)

1. Ob'yedinennyy institut yadernykh issledovaniy (for Strunov).
(Mesons)

MUKHIN, G. A.

USSR/Physics - Metallurgy

Card 1/1 Pub. 43 - 23/97

Authors : Rudnevskiy, N. K., and Mukhin, G. A.

Title : Certain characteristics of the entry of Al and Si into an arc discharge during the change in composition of the binary Al-Si alloy

Periodical : Izv. AN SSSR. Ser. fiz. 18/2, 258-259, Mar-Apr 1954

Abstract : A study of the dimensions and forms of an arc discharge spot showed that an increase in the Si content in the investigated interval of concentrations is followed by an increase in the spot area and in the depth of individual craters. This served as an indication that the entry of the substance of the alloy into the arc increases with the increase of Si concentration. This in turn was confirmed by the amount of aluminum and silicon oxides formed on the constant electrodes. The relation between the Al content of the alloy and the number of its atoms in the Arc is discussed. One USSR reference (1950).

Institution : State University, Scientific Research Institute of Chemistry, Gorkiy

Submitted :

MUKHIN, G.A.; HUDNEVSKIY, N.K.

Effect of various kinds of heat treatment of binary aluminum-silicon alloy components on the arc discharge reception. Izv. AN SSSR. Ser. fiz. 19 no.1:126-127 Ja-F '55. (MIRA 8:9)

1. Zavod imeni M.I.Kalinina i Nauchno-issledovatel'skiy Institut khimii pri Gor'kovskom gosudarstvennom universitete
(Spectrum analysis) (Spectrometer)

67221

SOV/58-59-7-16711

18.8100
18.1210

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 7, pp 293 - 294 (USSR)

AUTHORS: Rudnevskiy, N.K., Mukhin, G.A.

TITLE: Study of the Entry Into Discharge of Al-Si Alloy Substance in an AC Arc ²¹

PERIODICAL: Tr. po khimii i khim. tekhnol., 1958, Nr 2, pp 319 - 322

ABSTRACT: The authors studied the entry into discharge of the substance of a double Al-Si alloy with a concentration of Si ranging from 0.55 to 18.2%. They used an AC arc fed by a "DG-1" generator at a current intensity of 5a. It was established that on increasing the content of Si in the alloy, the area of the arc spot and the depth of damage grow; moreover, this growth is greater in the case of a carbon counterelectrode than in the case of a copper one. This points to a more intensive entry into discharge of the alloy substance in the case of high concentrations of Si. This regularity is confirmed by experiments dealing with the transfer of the alloy substance to the carbon counterelectrode. Oxides that had been transferred to the counterelectrode were placed in a crucible and calcinated at a temperature of 1,100°C, after which they were weighed. It turns out that there exists a linear dependence between the weight of the oxides and the roasting time,

Card 1/2

67221

SOV/58-59-7-16711

Study of the Entry Into Discharge of Al-Si Alloy Substance in an AC Arc

and the slope of the curves increases with an increase in the concentration of Si in the alloy. The authors also studied the dependence of transfer on the magnitude of the arc gap. On increasing the gap, the quantity of transferred oxides decreased. In order to determine the absolute contents of Al in the oxides, the latter were solubilized and analyzed by the spectral method. The investigations showed that the quantity of Al entering into discharge increases with a decrease in the content of Al in the alloy. The increase in the absolute intensity of the arc lines of Al on reducing its concentration in the alloy is explained in terms of the characteristic features of entry established through these experiments. The authors explain the fall-off in the intensity of the 2816.8 Å spark line of Al II that is observed in this connection, by a change in the conditions of exciting the spectrum.

V. Slavnyy

Card 2/2

MUKHIN, G.A.; MALYUGINA, N.I.; USPENSKAYA, T.S.

Burning out chromium in the synthetic manufacture of rubies.
Zhur. prikl. khim. 31 no.8:1160-1163 Ag '58. (MIRA 11:10)
(Rubies)

S/081/62/000/004/037/087
B156/B138

AUTHORS: Veksler, M. A., Furman, K. S., Mukhin, G. A.

TITLE: Prospects for the adoption of radioactive fluid density meters in the organic synthesis industry (experience of testing and introduction)

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1962, 314, abstract 4I206 (Sb. "Radioakt. izotopy i yadern. izlucheniya v nar. kh-ve SSSR. v. 1". M., Gostoptekhizdat, 1961, 257 - 262)

TEXT: The results are given of long duration tests on radioactive fluid density meters with halogen counters (ПЖР-1 (PZhR-1)), scintillation counters (ПЖР-2 (PZhR-2)) and differential high pressure ionization chambers (ПЖР-5 (PZhR-5)). The instruments were tested in aqueous solutions of calcium and zinc chlorides, and also in carbon tetrachloride. The tests made it possible to establish the effect of the composition of a liquid on instrument readings and the reproducibility of readings at different points on the scale. Design shortcomings were shown up and the basic error assessed. [Abstracter's note: Complete translation.]

Card 1/1

MIKHIN, G.A.; VEKSLER, M.A.; BOYARINOV, A.I. Primali uchastiye: TAMONKIN, I.V.;
TEREKHIN, E.M.

Laboratory high-frequency automatic titrator. Zav.lab. 29 no.8.
1008-1009 '63. (MIRA 16:9)
(Conductometric analysis)

MUKHIN G. F.

USSR/Diseases of Farm Animals. General Problems.

R

Abs Jour: Ref Zhur-Biol., No 9, 1958, 40599.

Author : Mukhin, G. F., Borodenok, A. I.
Inst : North Osetia Farm Institute.
Title : Morphology of the Hoof Horn and Prophylaxis
of Hoof Diseases in Sheep.

Orig Pub: Tr. Severo-Osetinsk. s.-kh. in-ta, 1956, 17,
277-285.

Abstract: The wall of the horn membrane in sheep hoofs forms at the expense of the growth of the tubular (corona) and leafy horn substance. On the outside it is covered with a thin layer of enamel. On the upper part of the corona the horn wall is built entirely at the expense of the tubular horn substance; somewhat lower than the corona rim, it is built at the

Card : 1/2

COUNTRY : USSR
CATEGORY : Farm Animals.
 : Small Horned Cattle.
AES. JOUR. : RZhBiol., No. 3, 1959, No. 12015
AUTHOR : Mukhin, G. F.
INST. : Institute of Animal Morphology AS USSR.
TITLE : The Morphological Skin Characteristics of
 : Sheep during Ontogenesis and under Overland
 : Grazing Conditions.
ORIG. PUB. : Tr. In-ta morfol. zhivotnykh AN SSSR, 1957,
 : vyp. 19, 76-102
ABSTRACT : Under the conditions of overland grazing which
 : are found in North Osetinskaya ASSR (Autonomous
 : Soviet Socialist Republic) and in Grosnenskaya
 : Oblast' the best development in skin
 : thickness of female lambs was observed during
 : the nursing period and when they were kept on
 : Alpine pastures. It was discovered that in
 : winter and early spring (the period of insuf-
 : ficient feed) the skin of all investigated ani-
 : mals become thinner at the age of 9-12 months

CARD:

1/1

COUNTRY : USSR
CATEGORY :

ABD. SOUR. : RZhBiol., No. 1959, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : the post-embryonic period (from birth to adulthood) the area of sheepskin increases in coarse sheep by 9.7 times, in Osetinskaya sheep by 8.69, in fine-fleeced hybrids by 8.7 in medium fine-fleeced hybrids by 9.5 times. It was observed that simultaneously with hair roots the skin of newborn lambs contains a large number of hair rudiments which represent reserves for increasing the fleece's density during the first 3 months of the lambs' life.

CARD:

3/4

Card 1/1

MUKHIN G. F.

USSR / Farm Animals. Small Horned Stock.

Q-2

Abs Jour: Ref Zhur-Biol., No 23, 1958, 105676.

Author : Mukhin, G. F.
Inst : Institute of Morphology of Animals, AS USSR.
Title : On the Variability of the Skeleton of Sheep in
the Mountain and Foothill Regions of the North-
ern Caucasus in Relation to Age of Animals.

Orig Pub: Tr. In-ta morfol. zhivotnykh AN SSR, 1957, vyp.
22, 199-208.

Abstract: It was demonstrated on 144 sheep of the Precoco
and Ossotian breeds and Hybrids, the age of which
ranged between birth and 5+ years, that in all
sheep the skeleton weight increases most inten-
sively during the period of grazing on summer
mountain pastures. The hybrids (Precoco X Osso-
tian), especially those with semi-fine wool, are

Card 1/2

MUKHIN, G. F., Doc Agr Sci -- (diss) "Economic and biological characteristics of sheep of the mountainous rayonny of the Northern Caucasus and means to their further improvement." Yerevan, 1960. 36 pp; (Committee of the Council of Ministers Armenian SSR on Higher and Secondary Specialist Education, Yerevan Zooveterinary Inst); 150 copies; price not given; list of author's works on pp 35-36 (22 entries); (KL, 19-60, 136)

MUKHIN, G.F.

Development of musculature and the nature of fat secretion in
purebred and hybrid sheep raised on the range. Trudy Inst.norf.
shiv. no.31:140-146 '60. (MIRA 13:6)

1. Severo-Osetinskiy sel'skokhozyaystvennyy institut.
(Sheep)

MUKHIN, G. G.

Mukhin, G. G. - "The creep of metals and the relaxation of stresses," Trudy Studench. nauch.-tekhn. o-va (Moscow technical college im. Bauman), 1, 1948, p. 79-86,-
Bibliog: 6 items

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

MUKHIN, G.G.

On the carbide phase in welded seams of type 18-8 steel. Avtom.
svar. 6 no.6:35-39 N-D '53. (MIRA 8:4)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche im. Baumana.
(Steel--Welding)

MUKHIN, G. G.

Dissertation: "Investigation of Changes in Structure and Mechanical Properties of Welds of Steel 1 Kh 18 N 9 T in the Process of Long Heating at High Temperature." Cand Tech Sci, Moscow Order of Labor Red Banner Higher Technical School imeni Fauman, 1st Apr 54. (Vechernyaya Moskva, Moscow, 8 Apr 54)

SO: SPM 243, 19 Oct 1954

Mac KHIN/C.C.

Processes of σ -formation in welds of Cr18Ni9Ti austenite steel during prolonged heating. I. I. Sidoren and G. G. Mukhin. *Metallurg. i Termichesk. Obrabotka Metal.*, *Sbornik Statei* 1955, 20-41. The effect of the alloy composition of V welds of Cr18-Ni9-Ti0.5 steels on the σ -phase formation during prolonged heat-treatment (up to 1000 hrs. at 850°) and the effect of stabilization at 800° (3 hrs.) and water quenching from 1100° (3 hrs.) was studied. In welds contg. 18-23% Cr σ -phase appeared after 25 hrs. and its proportion increased with the Cr content. In welds contg. 2% Si σ -phase appeared after 2.5 hrs. at 850° and the process of its formation was completed after 25 hrs.; when used for the prevention of hot-cracking the proportion of Si should not exceed 1.5%, especially if the welds were designed for high-temp. service. The presence of V increased the proportion of ferrite. In ferrite σ -phase appeared after 2.5-28 hrs. but in austenite it appeared only after 250 hrs. Stabilization affected the proportion of σ -phase and the mech. properties of the weld very little. Quenching improved the mech. properties of low alloyed welds of the 18-8 type. But in welds contg. more than 2% Si + 21% Cr or 1% Si + 1.5% V, quenching did not improve the mech. properties. Welds which could not be thermally treated should be made with electrodes such as to insure in the weld less than 0.1% C, 18-10% Cr, 8-9% Ni, less than 1.5% Si, and up to 1% Nb. I. Benicovitz

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MUKHIN, G.G.

PAL'CHUK, N.Yu.; MUKHIN, G.G.

Effect of chrome, silicon and vanadium on σ phase formation in manual welds on 18-8 type steels. Avtom.svar.8 no.4:42-57 J1-Ag'55. (MLRA 8:11)

- 1. Moskovskoye Vyssheye tekhnicheskoye uchilishche imeni Baumana (Steel alloys--Welding) (Metallography)**

SIDORIN, I.I., professor; MUKHIN, G.G., kandidat tekhnicheskikh nauk.

Investigation of sigma phase formation in welded seams of
Kh18N9T austenite steel. [Trudy] MVTU no.41:20-41 '55. (MLRA 9:10)

(Chromium-nickel-steel--Welding)

MUKHIN, G.G.; PAL'CHUK, N.Yu.

Effect of niobium on the structure of selded joints on 18-8 type austenite steel. Avtom. svar. 10 no.2:1-10 Mr-Ap '57. (MLRA 10:6)

1. Moskovskoye Vysshaye tekhnicheskoye uchilishche im. Baumana.
(Niobium) (Steel--Welding)

AUTHORS: Mukhin, G.G. and Pal'chuk, N.Yu. 125-58-6-11/14
~~Candidates of Technical Sciences~~

TITLE: On the Formation of a New Phase in Weld Beams on 18-8
Grade Steel, Containing Niobium (Ob obrazovanii novoy fazy
v svarnykh shvakh na stali tipa 18-8, soderzhashchikh niobiy)

PERIODICAL: Avtomaticheskaya Svarka, 1958, Nr 6, pp 88 - 91 (USSR)

ABSTRACT: With reference to criticisms expressed by N. Lashko [ref. 2,
the preceding article in this copy] on the formation of a new
"N-phase" in "18-8" grade steel, the authors defend their theory
and, although they partly agree with Lashko, insist that the
"N-phase" is to be considered a new phase of as yet unknown
crystalline structure, which appears in "18-8" grade steel
with high niobium content (after various heat treatments) and
reduces the plasticity and impact-resistance of the metal.
There are 2 tables, and 9 references, 2 of which are Soviet.

SUBMITTED: December 2, 1957

AVAILABLE: Library of Congress

Card 1/1 1. Seam welding 2. Niobium-Effectiveness

MUKHIN, Grigoriy Ivanovich; DAVTYAN, Sokrat Khachaturovich; KIRSH, Boris
Aleksandrovich; OSIPOVA, Agniya Lazarevna; MADIRA, R.S., redaktor;
GONCHAROV, I.A., tekhnicheskii redaktor.

[Problems of mechanizing and organizing work in the drilling of oil
and gas wells] Voprosy mekhanizatsii i organizatsii truda pri bure-
nii neftiannykh i gazovykh skvashin. Baku, Azerbaidzhanskoe gos.isd-
vo neftianoi i nauchno-tekhnicheskoi lit-ry, 1955, 182 p. (MLRA 9:4)
(Oil well drilling) (Gas, Natural)

MUKHIN, Georgiy Ivanovich; POTEMKIN, Mikhail Petrovich [deceased];
SMIRNOVA, N.P., redaktor; MAKHOVA, N.N., tekhnicheskii redaktor

[Australia; a survey of its physical and economic geography. A manual
for teachers] Avstraliia; fiziko-geograficheskii i ekonomiko-geogra-
ficheskii obsery. Posobie dlia uchitelia. Moskva, Gos. uchebno-
pedagog. izd-vo Ministerstva prosveshchenia RSFSR, 1956. 253 p.
(Australia--Geography) (MLRA 10:3)

DANILOV, A.D.; MUKHIN, G.I.; LENOV, M.; KISTANOV, V.; KOPILOV, N.;
KOSTEENIKOV, V.; MOSEKOVA, N.; LISOV, V.Ye., red.; KHOLIN,
I.A., red.; PONOMAREVA, A.A., tekhn.red.

[Distribution of branches of the national economy of the U.S.S.R.]
Razmeshchenie otraslei narodnogo khoziaistva SSSR. Pod red. A.D.
Danilova i G.I.Mukhina. Moskva, Gosplanizdat, 1960. 331 p.
(MIRA 13:11)

1. Moscow. Gosudarstvennyy ekonomicheskii institut. 2. Kafedra
ekonomicheskoy geografii Moskovskogo gosudarstvennogo ekonomi-
cheskogo instituta (for all, except Kholin, Ponomareva).
(Geography, Economic)

ANDREYEV, B.I.; VORONTSOVA, A.N.; DANILOV, A.D.; KISTANOV, V.V.;
KOSTENNIKOV, V.M.; KUSHNER, A.I.; LEDOVSKIKH, S.I.;
LESNOV, M.F.; MALINOVSKIY, E.P.; MOSHKOVA, N.V.; MUKHIN,
G.I.; PASHKEVICH, V.I.; RZHEVUSKAYA, D.M.; SAVCHENKO, N.A.;
SKOBEYEV, D.A. [deceased]; LISOV, V.Ye., red.;
SAZANOVICH, N.K., red.

[Economic regions of the U.S.S.R.] Ekonomicheskie raiony
SSSR. Moskva, Ekonomika, 1965. 589 p. (MIRA 18:6)

1. Moscow. Institut narodnogo khozyaystva. 2. Kafedra
ekonomicheskoy geografii Moskovskogo instituta narodnogo
khozyaystva im. G.V.Plekhanova (for all except Lisov,
Sazanovich).

ACC NR: AP6035747

(A,N)

SOURCE CODE: UR/0413/66/000/019/0117/0117

INVENTOR: Valer'yanov, S. L.; Sakharov, A. N.; Mukhin, G. M.

ORG: none

TITLE: Fuel pump control of an internal-combustion engine. Class 46, No. 186813

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 117

TOPIC TAGS: fluid pump, engine fuel pump, internal combustion engine

ABSTRACT: A fuel pump control of an internal-combustion engine contains a fuel-supply lever, kinematically connected with the spindle of a foot-pedal actuator, and a manual drive. To increase the reliability in shutting off the fuel supply when stopping the engine, the spindle is provided with an arresting lever which is coupled with the manual drive and has two working surfaces. One surface restrains the motion of the arresting device on the spindle during manual supply of fuel, and the other surface interacts with the spindle which turns to the side to shut off the fuel supply. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 04Feb63

Card 1/1

UDC: 621.43.038.5-521

AUTHORS: Nikeshin, B. and Mukhin, I., Mechanics SOV/2-58-12-12/19

TITLE: **Increasing Labor Productivity With the Type P80-2 Perforator (Povysheniye proizvoditel'nosti truda na perforatorakh P80-2)**

PERIODICAL: Vestnik statistiki, 1958, Nr 12, p 63 (USSR)

ABSTRACT: To ease the work of the operators, the authors have initiated some minor changes in the mechanism of the P80 2 perforator, which will increase labor productivity.

ASSOCIATION: Statisticheskoye upravleniye Leningrada (the Leningrad Board of Statistics)

Card 1/1

MARKUS, G.O.; MILLER, K.O.; MUKHIN, I.A.

Experimental automation of the preliminary coal processing
in the Karaganda Central Coal Preparation Plant. Ugol' 37
no.6:43-48 Je '62. (MIRA 15:7)
(Karaganda Basin—Coal preparation plants)
(Automatic control)

SOV/С5-59-4-9/14

AUTHORS: Orochko, D.I., Adel'son, S.V., Melik-Akhnazarov, T.Kh.,
Mukhin, I.I. and Chepurov, N.A.

TITLE: Characteristics of the Multi-Stage Counter-Current
Catalytic Cracking of Heavy Distillate Crudes (Ob
osobennostyakh stupenchato-protivotochnogo
kataliticheskogo krekinga tyazhelogo distillyatnogo
syr'ya)

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 4,
pp 48-53 (USSR)

ABSTRACT: Investigations of the VNII NP on the speeding up of
chemical reactions made it possible to recommend a
scheme for multi-stage counter-current processes
which use the principle of contacting fine-grained
materials with gases and vapours (REF 8). Preliminary
experiments, carried out under laboratory conditions,
showed that it was possible to intensify the oxidation
regeneration of catalysts 9 to 12 times (Ref 8) and
cracking processes 2 to 3 times (Ref 5). The lay-out
of the pilot plant, used for catalytic cracking, is
shown in Fig 1; this pilot plant can process 0.14 to

Card 1/4

SOV/65-59-4-9/14

Characteristics of the Multi-Stage Counter-Current Catalytic
Cracking of Heavy Distillate Crudes

0.6 tons of crudes per day. Diesel fuel and vacuum gas-oil, prepared at MNPZ from Romashkinskaya petroleum mixtures and a synthetic aluminium silicate catalyst as well as a microspherical natural clay catalyst were used during these experiments. The activity index of the synthetic catalyst was 30 to 32, that of the clay catalyst 20 and the sizes of the grains 0.20 to 0.50 mm. Results obtained during these experiments were compared with data from catalytic cracking processes of the same crudes on a pilot plant with a monosectional reactor, when the identical catalyst with much finer granulation was used (smaller than 0.2 mm) (Ref 10). The multi-stage counter-current process gave much more satisfactory results (Fig 2 and table 1). When using this method coke formation was reduced. This proved that the multi-stage counter-current catalytic cracking process is highly selective. When using this process in conjunction with a clay-catalyst (activity equals 20), for heavy crudes (table 2), the rate of the reaction is intensified 3 to 4 times. Gasoline obtained from heavy

Card 2/4

SOV/65-59-4-9/14

**Characteristics of the Multi-Stage Counter-Current Catalytic
Cracking of Heavy Distillate Crudes**

crudes, when using a synthetic catalyst, contains a larger amount of unsaturated compounds than the product from fluidized bed cracking processes. The octane number of the gasolines equals 80 and can even reach 100. The light gas-oils from the multi-stage counter-current catalytic cracking process have cetane numbers between 30 and 31, whereas the gas-oils prepared by monosectional cracking have cetane numbers of 18 to 26. The quality of the gasoline can be improved by catalytic purification over an aluminium silicate catalyst (Ref 10). The yield of light products in the one-stage catalytic cracking process of heavy distillates does not exceed 60 to 62%. This yield can be improved by using a selective 2-stage cracking process (up to 70%). The basic characteristics of the multi-stage counter-current process of the VNII NP were compared with those of a plant by GrozNII Giprogrozneft and those of the GrozNII regenerator system (Ref 4 and 6). Advantages of the multi-stage counter-

Card 3/4

SOV/65-59-4-9/14

**Characteristics of the Multi-Stage Counter-Current Catalytic
Cracking of Heavy Distillate Crudes**

current process are discussed and it is stressed that high octane gasoline and gaseous olefins can be prepared simultaneously. The experimental work was carried out by G.S.Shnayder, V.A.Basov, L.A.Rudnitskiy, N.P.Yepifanova, Ye.V.Leont'yeva and several investigators of the VNII NP. There are 3 figures, 2 tables and 13 Soviet references.

PRESENTED: 1st December 1958, by
S.V.Adel'son at the Conference of the GNTK USSR,
GNTK RSFSR, Scientific Technical Department NGP.

Card 4/4

SHINKEVICH, I.I.; LUKHIN, I.N.; TAPESHEB, V.T.; NEPOMNYASHCHIY,
I.L.; TELEPNEV, N.A.; KHARCHENKO, G.E.; GOL'DMAN, V.L.;
NAZARENKO, V.L. KOVALEVA, Z.G., red.

[Album of equipment for the chemical shops of coke by-
product plants] Al'bom oborudovaniia khimicheskikh tse-
khov koksokhimicheskogo zavoda. Khar'kov, Izd-vo
Khar'kovskogo univ. Pt.1. 1964. 109 p.
(MIRA 18:10)

MUKHIN, I.N.; KOVAL'SKIY, E.V.

Catalytic reforming of the Shebelinka gas condensate. Izv. vys.
uchob. zav.; khim. i khim. tekhn. 7 no.3:467-471 '64. (MIRA 12-10)

1. Khar'kovskiy politekhnicheskii institut imeni Lenina, kafedra
mekhanicheskogo oborudovaniya khimicheskikh zavodov.

MUKHIN, I. S.

USSR/Mathematics - Numerical Integra- Mar/Apr 52
tion

"Application of Interpolated Polynomials of Markov-Hermite to Numerical Integration of Ordinary Differential Equations," I. S. Mukhin, Inst of Precision Mech and Computing Techniques, Acad Sci USSR

"Prikl Matemat i Mekh" Vol XVI, No 2, pp 230-238

These formulas, connecting values of sought functions and its derivs, are a generalization of formulas obtained by usual interpolation of polynomials. Formulas may be applied in case when 1st derivs of right term of eq: $y' = f(x,y)$ are obtained without difficulty. Received 27 Nov 51.
209769

PA 241772

USSR/Mathematics - Approximation Errors

Nov/Dec 52

"Accumulation of Errors in the Numerical Integration of Differential Equations," I. S. Mukhin, Moscow, Inst of Precision Mech and Computing Techniques, Acad Sci USSR

"Priklad Matemat i Mekhan" Vol 16, No 6, pp 753-755

In the numerical soln of ordinary differential eqs of the type $y^{(n)} = f(x, y, y', \dots, y^{(n-1)})$ by means of the formulas of the quadrature type, the values of the desired function are ordinarily obtained with a certain error. The appearance of this error

241772

depends upon several causes: discard of remainder term in the formulas, errors in the original values of the function, round off errors occurring as a result of computations with a limited number of signs, etc. As an example the author considers the eq $y'' = y$, and compares errors resulting from various finite-difference eqs use; e.g. $y_{n+1} - 2y_n + y_{n-1} = y_n$ (central differences), Milne formulas, etc. Submitted 29 Apr 52.

MUKHIN, I. S.

241772

MUKHIN, I.S.

~~MUKHIN, I.S.~~ SRAGOVICH, A.I.; LEBEDNY, S.A., akademik, redaktor; DOBRO-
SMYSLOV, A.A., redaktor; SHEVCHENKO, G.N., tekhnicheskiy redaktor

[Construction of critical contours of uniformly stable slopes]
Postroeniye predel'nykh konturov ravnooustoichivyykh otkosov. Moskva,
Izd-vo Akademii nauk SSSR, 1954. 21 p. (MLRA 8:4)
(Soil mechanics)

МУХИЕ, Л.С., (Москва); СРАГОВИЧ, А.И., (Москва)

Contour shapes of uniformly stable slopes. Izsh. ser. 23:
121-131 '56. (NERA 9:10)

(Soil mechanics)

MUKHIN, I.S.

[Experiments in using the BESM electronic computer for machine translating] Opyty avtomaticheskogo perevoda na elektronnoi vychislitel'noy mashine BESM. Moskva, Akad.nauk SSSR, 1956. 28 p.

(MIRA 14:6)

(English language—Machine translating)

(Electronic digital computers)

MUKHIN, I. S., Cand. in Phys. Math. Sci. and BEL'SKAYA, I. K.

"Automatized Translation from English into Russian Using the BESM" a paper presented at the Conference on Methods of Development of Soviet Mathematical Machine-Building and Instrument-Building, 12-17 March 1956.

Translation No. 596, 8 Oct 56

MUKHIN, I. S., Cand. of Physicomathematical Sciences, LY/PUNOV, A. A. Doctor of Physicomathematical Sciences, and PANOV, N. Yu., Doctor of Technical Sciences.

"Automation of Translation From One Language to Another." a paper given at the Conference on Scientific Problems of Production Automation Moscow, State U., 15-20, Oct 56.

MUKHIN, I.S., kandidat fiziko-matematicheskikh nauk.

British digital computers. Vest.AN SSSR 26 no.7:55-56 J1 '56.
(Electronic calculating machines) (MIRA 9:9)

170 N 11 17, 11 -

BEL'SKAYA, I.K.; KOROLEV, L.H.; MUKHIN, I.S.; PANOV, D.Yu.; RAZUMOVSKIY, S.N.

Some problems in automatic translation. Vest.AN SSSR 26 no.12:24-
33 D '56. (MLRA 10:1)

(Machine translating)

SOV/112-58-1-927

Translation from: Referativnyy zhurnal, Elektrotehnika, 1958, Nr 1, p 135 (USSR)

AUTHOR: Panov, D. Yu., Lyapunov, A. A., and Mukhin, I. S.

TITLE: Automation of Interlingual Translations
(Avtomatizatsiya perevoda s odnogo yazyka na drugoy)

PERIODICAL: V sb.: Sessiya AN SSSR po nauchn. probl. avtomatiz. proiz-va, 1956. Plenarn. zasedaniya, Moscow, AS USSR, 1957, pp 181-213, discussion p 214.

ABSTRACT: A detailed description is submitted of two methods of translating foreign languages into Russian, as developed at the Mathematical Institute imeni Steklov and at the Institute of Fine Mechanics and Computing Techniques. The first method was programmed for "Strela" computer; the second method for "BESM" computer. In addition to translations from European languages, some problems of translation from Chinese and Japanese are also considered, as well as from one foreign language into another, using Russian as an intermediary language. There are 7 illustrations.

N. Ya. N.

AVAILABLE: Library of Congress

Card 1/1 1. Language 2. Computers--Applications

MUKHIN, I.V.

The restoration of singeing troughs. Tekst.prom. 15 no.12:48
D '55. (MLRA 9:3)

1. Nachal'nik remontno-montashnogo otdela otbel'no-krasil'noy
fabriki Glukhovskogo kombinata.
(Textile industry--Equipment and supplies)

MUKHIN, I.V.

Case of liposarcoma of pararenal cellular tissue of a double and dystopic kidney. Urologia 22 no.2:46-47 Mr-Apr '57. (MIRA 10:7)

1. Iz khirurgicheskoy kliniki (zav. - prof. K.T.Ovnatanyan) Stalinskogo meditsinskogo instituta i Stalinskoy klinicheskoy bol'nitsy imeni K.Ye.Voroshilova (Glavnyy vrach N.I.Igutaya).

(KIDNEYS, neoplasms

liposarcoma of double dystopic kidney)

(LIPOSARCOMA, case reports

kidney, double dystopic)

(KIDNEYS, abnorm.

double dystopic kidney with liposarcoma of pararenal cellular tissue)

MUKHIN, I.V.

Some remarks on two-channel well equipment for radiation logging.
Razved. i prom. geofiz. no.40:66-67 '61. (MIRA 15:7)
(Oil well logging, Radiation--Equipment and supplies)

ACC NR: AP6034520

SOURCE CODE: UR/0016/66/000/010/0054/0058

AUTHOR: Mulchin, I. V.; Firsova, K. F.; Messinova, O. V.

ORG: Kazan University im. Ul'yanov-Lenin (Kazanskiy universitet);
Kazan Institute for Postgraduate Medicine (Kazanskiy institut
usovershenstvovaniya vrachey)

TITLE: Some data on desoxyribonucleases of pathogenic Clostridia

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 10,
1966, 54-58

TOPIC TAGS: bacteria, bacterial genetics, desoxyribonuclease, Cl.
septicum, Cl. perfringens, enzyme, chromatography

ABSTRACT: Synthesis and some properties of desoxyribonucleases of
pathogenic *Clostridia* were studied. The enzymes of five
Cl. septicum and 45 *Cl. perfringens* strains were studied
using Jeffris' dish method and the Ostwald microviscosimeter.
Changes in enzyme accumulation were studied according to
the phases of microbial population development. Enzyme
synthesis was greatest during the logarithmic growth phase.

Card 1/2

UDC:576.851.55.06.098.31:577.155.2

ACC NR: AP6034520

and the most active enzyme was found in *Cl. septicum*. The desoxyribonuclease of *Cl. perfringens* was weaker, and its activity varied according to culture strain and conditions. The *Clostridia* enzymes studied differed chemically, physiologically, and in their action upon the substrate. A purified preparation of *Cl. septicum* desoxyribonuclease was obtained by chromatography on an ion-exchange column. The enzyme may thus be described more fully and its role in the pathogenesis of gas gangrene may be determined. Orig.

art. has: 1 figure and 1 formula.

[EL]

[WA-50; CBE No. 14]

SUB CODE: 06/ SUBM DATE: 04Nov65 / ORIG REF: 003/ OTH REF: 013

Card 2/2

MUKHIN, I. Ye.

MUKHIN, I. Ye., aspirant

Pollution and spontaneous purification in the middle Northern Donets River. Gig. i san. 22 no.9:76-79 S '57. (MIRA 10:12)

1. Iz Ukrainkogo nauchno-issledovatel'skogo instituta kommunal'noy gigiyony.

(WATER POLLUTION

in Northern Donets river, spontaneous purification)

MUKHIN, I.Ye. (Kiyev)

Sanitary aspects of dumping soda industry sewage into natural waters.
Vrach.delo no.1:65-68 Ja '58. (MIRA 11:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut kommunal'noy
gigiyeny.

(SODA INDUSTRY--BY-PRODUCTS) (WATER--POLLUTION)

MUKHIN, I.Ye. (Kiyev)

Role of collecting in sanitary protection of reservoirs from
pollution with industrial waste waters. Vod. i san. tekhn. no.12:
6-8 D '58. (MIRA 11:12)
(Sewage disposal)

MUKHIN, I. Ye., Candidate of Med Sci (diss) -- "The sanitary conditions of the upper Donets River, its sanitary protection and use for supplying water to the Donbass". Kiev, 1959. 13 pp (Khar'kov State Med Inst), 200 copies (KL, No 20, 1959, 116)

MUKHIN, I. I., kand.med.nauk

Necessity for determining the radioactivity of water in selecting
subterranean sources of drinking water. Gig. i san. 26 no.11:9-14
N '61. (MIRA 14:11)

1. Iz Ukrainского nauchno-issledovatel'skogo instituta kommunal'noy
gigiyeny.

(WATER-SUPPLY)

(RADIOACTIVITY-MEASUREMENT)

MAHNE, I.Ie.; PAVLOVA, Zh.L.; PROVITSINA, I.I.

Relationship between the radium content in vegetables and grain
crops and its concentration in the soil. Vop. pit. 24 no.2:11-14
Mk-Ap '65. (MIRA 18:8)

U. Otdel radiatsionnoy gigiyeny (stav. - kand.med.nauk I.Ye.Mukhin)
Ukrainskogo nauchno-issledovatel'skogo instituta kommunal'noy
gigiyeny, Kiyev.

MUKHIN, K.; DRAGUNOV, M.

The Gorkiy Automobile Plant after the wage regulation.
Sots. trud 6 no.5:105-110 My '61. (MIRA 14:6)

1. Nachal'nik otdela truda i zarabotnoy platy Gor'kovskogo avtozavoda (for Mukhin). 2. Zamestitel' nachal'nika otdela truda i zarabotnoy platy Gor'kovskogo avtozavoda (for Dragunov).
(Gorkiy—Automobile industry)
(Wage payment systems)

C-6

MUKHIN, K. N.

Category : USSR/Nuclear Physics - Origin of charged and neutral particles through matter.

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 610

Author : Barkov, L.M., Mukhin, K.N.

Title : Slowing Down of Fission Neutrons in Water

Orig Pub : Atom. energiya, 1956, No 3, 31-32

Abstract : A procedure is described and experimental results are given for the measured values of τ for neutrons obtained by fission of U^{235} , moderated in water to energies $E = 1.46$ ev. The value obtained for τ is $\tau = 1.46 \text{ ev} = 29.4 \pm 1.5 \text{ cm}^2$.

Card : 1/1

M. M. K. N.

Category : USSR/Nuclear Physics - Origin of charged and neutral particles
through matter

C-6

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 609

Author : Barkov, L.M., Makar'in, U.K., Mukhin, K.N.

Title : Measurement of Slowing Down of Neutrons in Water in the Energy Range
1.46 -- 0.025 ev.

Orig Pub : Atom. energiya, 1956, No 3, 33-39

Abstract : An Indium detector was used to measure the spatial distribution of the resonant ($E = 1.46$ ev) and thermal neutrons, formed when photoneutrons from a $Sb + ^9Be$ source were slowed down in water. The neutron age τ at 1.46 ev and the diffusion length of the thermal neutrons in water was determined, as was the square of the slowing-down length of the neutrons Δr from 1.46 ev to thermal energy (0.025 ev).

Card : 1/1

Mukhin, K.N.

Category : USSR/Nuclear Physics - Origin of charged and neutral particles through matter.

C-6

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 611

Author : Barkov, L.M., Venediktov, A.P., Mukhin, K.N.

Title : Slowing Down of Fission Neutrons in Uranium-Water Media

Orig Pub : Atom. Energiya, 1956, No 3, 40-44

Abstract : The spatial distribution of the density of resonant neutrons ($E = 1.46$ ev), formed by moderating fission neutrons from U^{235} from a "point" source were measured in three versions of uranium-water lattices, made up of thick (35 mm) blocks of natural uranium, clad in cadmium tubes. It was shown that there is no anisotropy in the distribution of the moderated neutrons, and the values of τ were determined.

Card : 1/1

MURKIN, K.N.

✓ Origin of slow π^+ mesons in nuclei of a photoemulsion
 under the action of protons with energies of 460 m.e.v. and
 neutrons with an effective energy of 400 m.e.v. V. V.
 Albers, L. M. Barkov, R. I. Gerasimova, I. T. Gurevich,
 K. N. Murkin, B. A. Nikol'skii, and S. P. Poporkova.
Zhur. Eksp. i Teor. Fiz. 30, 1028-33 (1956); *ibid.* 31,
 1045-54, following abstr. — By aid of a synchrotron
 these protons and neutrons are generated, which then give
 rise to the charged mesons in a photoemulsion consisting to
 85% of AgBr. The energy distribution of all the π mesons

7

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is measured, the cross sections are measured, and the stars,
 which accompany the formation of π mesons, are analyzed
 (av. no. of beams per star). A nomogram is presented to
 take care of the edge effect.

Werner Jacobson

Handwritten initials

AL'PERS, V.V.[deceased]; BARKOV, L.M.; GERASIMOVA, R.I.; GUREVICH, I.I.;
MISHAKOVA, A.P.; MUKHIN, K.M.; NIKOL'SKIY, B.A.

Production of slow J -mesons in photographic emulsion nuclei by
660 Mev protons. Zhur.eksp. i teor.fiz. 30 no.6:1034-1039 Je '56.
(MLRA 9:10)

(Mesons) (Nuclear reactions)

PIUKHIN, S. V.

BARKOV, L.M.; MAKAR'IN, V.K.; MUKHIN, K.M.

Measuring the diffusion length of thermal neutrons in ice.

Atom.energ. 3 no.7:54-55 J1 '57. (MIRA 10:7)

(Neutrons) (Nuclear reactors)

MURKIN, R.M.

1991
✓ PRODUCTION OF SLOW π^+ MESONS IN POLYMER EMULSION NUCLEI BY 400 MEV PROTONS AND NEUTRONS OF 400 MEV EFFECTIVE ENERGY *V. L. Albova.*

Handwritten initials

M. Barkov, B. J. Gerasimova, I. I. Gurevich, K. N. Lukin, B. A. Mikheev, and E. P. Lomakova. Soviet Phys. Usp. 3, 914 (1961) Jan

The method of an emulsion chamber was used to convert into the production of charged mesons by 400-Mev protons and neutrons of 400 Mev effective energy (auth)

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MUKHIN, K. N.

Slowing down of fission neutrons in water. L. M. Barkov and K. N. Mukhin. Atomic Energy (U.S.S.R.) (English translation), 1, No. 3 (Feb. in J. Nuclear Energy A, 11-3 (1967)). ... has been measured for U²³⁵ fission neutrons slowed down to 1.10 e.v. in water. The result is $\Sigma_{sc} = 0.4$ in 1.5 sq. cm. ...
2 4
7

MUKHIN

19
 Measurement of the slowing down of neutrons in the energy range 1.46-0.025 e.v. in water. L. M. Barkov, V. K. Makar'in, and K. N. Mukhin. Atomic Energy (U.S.S.R.) (English translation) 1, No. 3 (Pub. in J. Nuclear Energy 4, 04-102(1957)).—Photon neutrons from an Sb-²¹⁰Be source were slowed down in water and the resulting distribution of resonance ($R_0 = 1.48$ e.v.) and thermal neutrons was measured with an In detector. The mean square slowing-down length to 1.46 e.v. was detd. as 5.83 ± 0.15 sq. cm. for a large source and 5.48 ± 0.15 sq. cm. for a small source. The diffusion length for thermal neutrons in 19° water was found to be 2.69 ± 0.02 cm. The mean slowing-down length from 1.46 to 0.025 e.v. (thermal

3
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energies) was detd. as 1.1 ± 0.5 and 1.0 ± 0.5 sq. cm. for the large and small sources, resp. James L. Laue

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slowing down of fast neutrons in uranium-water media.
 M. Barkov, A. P. Vedenov, and E. M. Aronin,
 Atomic Energy (U.S.S.R.) (English translation) (Pub. in *J. Nuclear Energy* 4, 163-8 (1967)). — The d. distribution of resonance neutrons from a point source of neutrons in U-water lattices. The total square slowing-down length has been detd. for water-to-U vol ratios of 0.1, 1, and 2.3 as 66 ± 3 , 47 ± 2 , and 37 ± 2 sq. cm., resp. For water alone it was found to be 29.4 ± 1.6 sq. cm. J. L. L.

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 2/22
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3

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 [Signature]

Makar'in, K. N.

AUTHORS: Barkov, L.M., Makar'in, V.K., Mukhin, K.N. 89-7-13/32

TITLE: Measuring of the Diffusion Length of the Thermal Neutrons in Ice
(Izmereniye diffuzionnoy dliny teplovykh neytronov vo l'du)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 7, pp. 54-55 (USSR)

ABSTRACT: In an ice prism of $100 \times 100 \times 130$ cm³ the authors carried out measurements of the distribution of the density of the thermal neutrons which occur with slowing down of neutrons of a Sb + Be source. The source was fitted into the center of the prism and an indium foil (by means of which the density of the thermal neutrons was measured) was irradiated at various distances from the source in channels within the prism. ($17.4 \leq R \leq 31$ cm). For the purpose of eliminating the influence exercised by the cavity, the indium foil was irradiated inside ice rods which were fitted within the channels. The activation due to the resonance neutrons is infinitely small in the intervals $R < 17$ cm because the density of the resonance neutrons at increasing distance from the source decreases rapidly. The activation by the resonance neutrons at $R = 17$ cm amounts to only 0.1% of the entire activation of the foil. The method of the measurements was described already in one of the authors previous works. The diffusion length for ice at

Card 1/2

Measuring of the Diffusion Length of the Thermal Neutrons
in Ice

89-7-13/32

$t^0 = -14^{\circ}\text{C}$ amounted to $L_1 = 2.85 \pm 0.05$ cm. The density of the ice was determined hydrostatically and amounted to 0.89 ± 0.01 g/cm³. The value obtained for the diffusion length L_1 of the thermal neutrons in ice can be compared with the previously measured diffusion length of the neutrons in water: $L_w = 2.68 \pm 0.02$ cm. When comparing the value, the various ranges of the absorption Σ_0 and the transition Σ_{tr} for water and ice must be taken into account. Next, some details are discussed. The agreement of the experimental value for L_1 with that of L_w (by taking account of the dependence of the ranges Σ_0 and Σ_{tr} upon the density and the temperature) indicates a slight influence of the modification of the chemical binding upon the diffusion length on the occasion of transition from water to ice. ($\Delta L \approx 0.1$ cm). There is 1 Slavic reference.

SUBMITTED: February 5, 1957

AVAILABLE: Library of Congress

1. Neutrons - Diffusion - measurement
2. Ice - Applications

Card 2/2

MUKHIN, Konstantin N.

"Pion Production by Pions Near Threshold"

paper presented at the Intl Conference on High Energy Physics, Rochester, N. Y.
and/or Berkly California, 25 Aug - 16 Sep 1960.

Joint Institute for Nuclear Research, Dubna, USSR

38152

S/058/62/000/004/033/160
A058/A101

26.2244

AUTHORS: Mukhin, K. N., Makar'in, V. K., Venediktov, A. P.

TITLE: Thermal neutron diffusion in anisotropic media

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 61, abstract 4B457
(V sb. "Neytron. fizika". Moscow, Gosatomizdat, 1961, 198 - 210)

TEXT: The authors describe measurements of thermal neutron diffusion in lead-water plane and rod lattices. A photoneutron Sb + Be source was used. Special measures were taken so that the distribution of neutron sources would be close to plane. The distribution in density of thermal neutrons was measured by the indium detector method. The authors arrived at the following conclusions: 1) for plane lattices, experimental results coincide with theoretical calculations; 2) diffusion anisotropy $L_{||}^2/L_{\perp}^2$ in plane lead-water lattices can attain magnitudes of ~ 2 , and in rod lattices, ~ 1.5 .

A. Kamayev

[Abstracter's note: Complete translation]

Card 1/1

S/056/62/043/001/047/056
B102/B104

AUTHORS:

Barkov, L. M., Mukhin, K. N., Ogurtsov, V. V.,
Romantseva, A. S., Svetlolobov, I. A., Chuyeva, S. A.,
Shlyapnikov, R. S., Likhachev, M. F., Stavinskiy, V. S.,
Strunov, L. N.

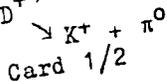
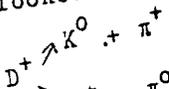
TITLE:

The problem of the D^+ -meson

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
no. 1(7), 1962, 335-337

TEXT: The authors have searched for a D^+ -meson production or a decay among 14,000 pairs of photographs. A propane bubble chamber with pulsed magnetic field was irradiated with a beam of positively charged particles (momentum ≈ 1.8 Bev/c) containing up to 9% K^+ mesons. The processes looked for were $K^+ + p \rightarrow D^+ + \Sigma^+$ and



Card 1/2

The problem of the D^+ -meson

S/056/62/043/001/047/056
B102/B104

The first branch of the decay reaction is the more possible. Neither a process $K^+ + p \rightarrow D^+ + \Sigma^+$ nor one of the type $K^+ + n \rightarrow D^+ + \Sigma^0$ could be found. It is inferred that the D^+ meson production cross section in K^+N reactions will be smaller than $1.2 \cdot 10^{-29} \text{cm}^2$.

ASSOCIATION: Institut atomnoy energii (Institute of Atomic Energy)
(R. S. Shlyapnikov); Ob"yedinennyy institut yadernykh
issledovaniy (Joint Institute of Nuclear Research)
(L. N. Strunov)

SUBMITTED: April 25, 1962

Card 2/2

MUKHIN, Konstantin Nikiforovich; KALYUZHAYAYA, T.P., red.; VLASOVA,
~~S.S.A.~~, tekhn. red.

[Introduction to nuclear physics] Vvedenie v iadernuiu fi-
ziku. Moskva, Gosatomizdat, 1963. 588 p. (MIRA 16:12)
(Nuclear physics)

L 58337-65 EWT(m) Feb DIAAP
ACCESSION NR: AT5010445

UR/3136/64/000/700/0001/0015

AUTHOR: Kruchinin, S. P.; Mukhin, K. B.; Romantseva, A. B.; Svetloobov, I. A.; Sulkovskaya, M. M.; Chuyeva, S. A.; Shiyapnikov, R. B. 28
21
CH

TITLE: Elastic p-p scattering at 1.45 BeV

SOURCE: Moscow. Institut atomnoy energii. Doklady, no. 700, 1964. Uprugoye (p-p)-rasseyaniye pri 1,45 BeV, 1-15

TOPIC TAGS: elastic scattering, proton proton scattering, pion scattering, differential cross section

ABSTRACT: A propane bubble chamber was used to investigate the angular dependence of elastic scattering of protons by protons at an incident-proton momentum of 2.2 BeV/c, which is higher than the energies used in earlier investigations. The protons came from the 10 BeV accelerator of the Joint Institute of Nuclear Research. A total of 17,000 pairs of stereophotographs was scanned, ~900 cases of elastic π^+p and pp scattering cases were analyzed, and the reduction of these data made it possible to determine the differential cross section of elastic pp scattering at 1.45 BeV over the entire angle interval of $0-90^\circ$ (c.m.s.). Calculations based on

Card 1/2

L 58337-65

ACCESSION NR: AT5010445

7

the optical model with a small region of phase shift gave best agreement with the experimental data with parameter values $R_1 = 0.45 F$, $R_2 = 0.95 F$, $a = 0.344$, and $\phi = 1.77$ rad. (R --interaction radius, ϕ --phase shift, a --amplitude of transmitted wave for a unit amplitude of incident wave). In the energy region from 0.38 to 30.9 BeV, the differential cross section is proportional to $A \exp(-P_{c.m.s.}/P_0)$, with $A = 115$ mb/sr and $P_0 = 143$ MeV/c. "The authors thank I. I. Gurevich for valuable advice, A. P. Benediktov, V. I. Baranov, and A. V. Tel'nov for help in operating the equipment, and V. S. Balova, L. S. Baturina, and A. A. Kondrashina for participating in the measurements." Orig. art. has: 5 figures, 9 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 001

OTHER: 012

BR
Card 2/2

MUKHIN, Konstantin Nikiforovich; VAYSENBERG, A.O., prof.,
retsenzent; KALYUZHNYAYA, T.P., red.

[Introduction to nuclear physics] Vvedenie v iadernuiu
fiziku. Izd.2., perer. i dop. Moskva, Atomizdat, 1965.
720 p. (MIRA 18:9)

BERKOV, L.M.; MUKHIN, K.N.; SUYETIN, V.V.; et al. (MIRA 1984), P. 1.

Semiautomatic device for processing double chamber stereo-
photographs. Pricl. i tekh. eksp. d. no. 115-82, 1984, 10.
(MIRA 1984)

1. Institut atomnoy energii Ak. N. S. S. S. R.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

22

07

COMMON ELEMENTS

OPEN

MATERIALS INDEX

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

The magnitude of the latent heat in the "reforming" process. M. M. Gerasimov and L. K. Mukhin... *Nefteyaner Khimiya* 28, No. 5, 68(1935). The latent heat of the reaction calcd. by Obryadchikov's method (C. A. 26, 1104) amounted to an average of -148 cal./kg. for the gasolines investigated. A. A. Bochtinik

MUKHIN, L.K.

Mukhin, L.K. --"Nitration of Paraffin Hydrocarbons with Salts of Nitric Acid and Oxides of Nitrogen." Land Tech Sci, Moscow Petroleum Inst, Moscow 1953. (REFERATIVNIY ZHURNAL--KHIMIYA, Nol, Jan 54.)

Source: SUM 168, 22 July 1954

ZHIGACH, K.F.; ADEL', I.B.; MUKHIN, L.K.; DEMISHEV, V.N.; GOCHAROV, N.B.

Oil-base drilling fluids for revealing the productive strata and for
drilling under complex conditions. Neft.khoz.34 no.8:9-14 Ag '56.
(Oil well drilling fluids) (MIRA 9:10)

MUKHIN, L. K.

Zhigach, K. F., L. K. Mukhin, and V. N. Demishev.

"Physico-chemical Basis in the Preparation of Anhydrous Solutions"

**Problems of Petroleum Production and Petroleum Engineering, Moscow, Neftyanoy
institut, Gostoptekhnizat, 1957, 393pp. (Trudy vyp. 20)
This book is a collection of articles written by professors and faculty members
of the Petroleum Inst. in I. M. Gubkin.**

ZHIGACH, K.F., prof., doktor khimicheskikh nauk; MUKHIN, L.K., kand.
tekh.nauk; DEMISHEV, V.N., assistant

Physicochemical principles for preparing anhydrous solutions.
Trudy MNI no.20:154-164 '57. (MIRA 13:5)
(Oil well drilling fluids)

MUCHIN, L.K.; GONCHAROV, N.N.

Using petroleum-base fluids in drilling second shafts in wells.
Azerb. neft. khoz. 36 no.10:24-26 0 '57. (MIRA 1:1?)
(Oil well drilling fluids)

Mu KHing, L. K.

PHASE I BOOK EXPLOITATION SOV/2124

11(4)

Mezhuzovskoye soveshchaniye po voprosam novoy tekhniki v nefteyanoy promyshlennosti. Moscow, 1956

Ma. i. I. M. Murav'yev, Professor, Doctor of Technical Sciences, and V. M. Dakhnov, Professor, Doctor of Geological and Mineralogical Sciences; Editorial Board: K. A. A. Tikhomirov, (Resp. Ed.), I. M. Murav'yev, Professor, V. I. Yegorov, Candidate of Geological Sciences, M. Chernozhukov, Professor, Ye. M. Rumayev, Professor, M. I. Chernozhukov, Professor, G. M. Pan-shenkov, Professor, V. M. Dakhnov, Professor, Doctor of Geological and Mineralogical Sciences, M. A. Almazov, Docent, V. M. Vinogradov, Candidate of Geological Sciences, V. I. Biryukov, Candidate of Geological Sciences, K. I. Tagiyev, and V. M. Gurevich; Executive Ed.: M. P. Dobrylina; Tech. Ed.: E. A. Mukhina.

PURPOSE: The book is intended for engineers and scientific personnel working in the petroleum industry and vuzses. It may also serve as a textbook for advanced students of petroleum vtuzaes.

COVERAGE: The book contains articles written by staff members of the Moscow, Gruznyy, and Ufa Petroleum Institutes, the Kuybyshev and Azerbaydzhan' Institute, the Ufa Scientific Center, the Scientific Institute of Oil Drilling, KBNP (Design Office of Research Institute of Oil Drilling), KBNP (Design Office of Petrochemicals), and the Bashneft Association (Bashneft Association of the USSR). These papers, read at the Mezhuzyovskoye Scientific Conference, deal with new technical developments in the petroleum industry introduced since 1956. Emphasis is given to the importance of efficient drilling, geophysical prospecting, working of oil and gas deposits, and the use of new devices employed in oil and gas exploitation. There are 56 references; 44 Soviet, and 8 English.

Zhigach, K. P., L. K. Mukhin, V. K. Demishov, and M. N. Goncharov 92 [Moscow Petroleum Institute], Petroleum-Base Drilling Fluids The authors state that petroleum-base drilling fluids are being used to penetrate horizons to maintain the penetration rate at the bottom-hole zone, and to increase the well output. The use of petroleum-base drilling fluids is particularly efficient for opening formations with high permeability and low pressure, where the absorption of a large amount of fluid by the productive formation may prove dangerous. Petroleum-base drilling fluids also prove useful in opening formations with low permeability, particularly where the formation contains swelling clay. Petroleum-base drilling fluids produce good results in drilling under complex geological conditions and in drilling deep and directional wells.

MURHIN, L. K., ZHIGACH, K. F., REKIND R, P. A., SERB-SERBINA, N. H.,
ADEI, I. B., FINKELSNFYN, K. Z., DEMISHEV, V. N., KISTER, G. G., (SECTION I)

"Physico-Chemical and Technological Investigations of Mud Fluids
Used for Drilling Wells."

Report submitted at the Fifth World Petroleum Congress, 30 May -
5 June 1959. New York.

YAROV, A.N.; MUKHIN, L.K.

Using oil-base fluids for drilling gas-bearing layers.

Izv. vys. ucheb. zav.; neft' i gaz 2 no.5:45-48 '59.

(MIRA 12:8)

I.Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
im. akademika I.M. Gubkina.

(Oil well drilling fluids)

KAS'YANOV, N.M.; MUKHIN, L.K.

Apparatus for studying elasto-viscous properties of disperse systems
with an automatic photographic recorder. Izv. vys. ucheb. zav.; neft'
i gaz 2 no.8:115-118 '59. (MIRA 12:11)

I. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
im. akad. I.M. Gubkina.
(Viscosity) (Elasticity)

KAS'YANOV, N.M.; MUKHIN, L.K.

Viscosity of drilling fluids from petroleum. *Izv.vys.ucheb.
zav.neft' i gas* 3 no.2:33-38 '60. (MIRA 13:6)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promy-
shlennosti im. akad. I.M.Gubkina.
(Oil well drilling fluids)

KAS'YANOV, N.M.; MUKHIN, L.K.

Effect of temperature on the viscosity of oil-drilling fluids.
Izv. vys. ucheb. zav.; neft' i gaz 3 no.4:37-41 '60. (MIRA 15:6)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
imeni akademika I.M. Gubkina.
(Oil well drilling fluids)

LEONIDOV, V.I.; MUKHIN, L.K.; ZHIGACH, K.F.

Improving the method of studying the effect of drilling fluids
on the strength of clay rocks. Izv. vys. ucheb. zav.; neft'
i gaz 4 no.2:25-30 '61. (MIRA 15:5)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
imeni akademika I.M.Gubkina.
(Oil well drilling fluids) (Clay)

LEONIDOV, V.I.; MUKHIN, L.K.

Specific conditions causing caving during oil well drilling in
Turkmenia. Trudy MINKHIGP no.35:120-126 '61. (MIRA 14:11)
(Turkmenistan--Oil well drilling fluids)

DEMISHEV, V.N.; MUKHIN, L.K.

Device for studying flow properties of drilling fluids in static
and dynamic conditions. Trudy MINKHIGP no.35:181-186 '61.
(MIRA 14:11)
(Oil well drilling fluids)